

ATGGCTCTGGGGCCCAACTGTGGCATCCTACTGTTTCTGGCTGTTTCTGGGTGTGGC
 CATCCCCAGGTTTCAAACCTCGGGAAGTCGAATCGTGGGAGGGCATGCTGCCCCAGC
 AGGCACATGGCCGTGGCAGGCTAGCCTCCGTCTGCACAAGGTGCACGTGTGTGGAG
 GCTCCCTGCTCAGTCCAGAATGGGTGCTCACAGCAGCCCACTGCTTCTCTGGGTCTG
 TGAACCTCGTCTGATTATCAGGTGCACTTGGGAGAGCTTACGGTCACACTGTCTCCCC
 ACTTCTCCACTGTAAAACGGATCATCATGTACACTGGCTCTCCAGGACCACCGGGGT
 CCAGTGGGGACATTGCCCTGGTGCAGCTGTCTCCCCGGTGGCCCTTTCCAGCCAG
 GTCCAGCCTGTGTGCCTCCCAGAGGCCTCAGCTGACTTCTACCCTGGGATGCAGTGC
 TGGGTGACTGGCTGGGGCTATACAGGGGAGGGAGAGCCTCTGAAGCCCCCATACAA
 CCTTCAGGAGGCCAAAGTCTCTGTGGTGGATGTAAAGACCTGCAGCCAGGCTTACAA
 TAGTCCCAATGGCAGCCTCATCCAGCCAGACATGCTATGCGCCCGGGGCCCTGGGG
 ATGCCTGCCAGGATGACTCTGGAGGGGCCACTAGTCTGCCAGGTGGCTGGAACCTGG
 CAGCAGGCCGGCGTTGTCAGCTGGGGTGAGGGCTGTGGCCGCCCTGACCGCCCTG
 GCGTCTATGCCCGGGTTACTGCCTATGTAACTGGATCCACCACCACATCCCGGAAG
 CAGGGGGCTCAGGAATGCAAGGGCTTCCCTGGGCTCCTCTCCTGGCTGCCCTCTTC
 TGGCCAAGCCTCTTCTGCTGCTGGTCTCTGGAGTCCTGATGGCCAAGTACTGGCTG
 AGCTCTCCCTCCCACGCGGCCTCGGAACCTCTGAATGAGGTGTAGCAACCAACCCAAG
 TGTCTTTCTTAAATAAGTTAGTGTTTATTCAGTTTGCTTTGCCCTCCCCTCCCCTTAG
 CTTTGACTTAGGAAGCCAAAGTTTTCTGCATCAGATTATTGCAACATTTAACCTGAATT
 TGTAGAACGGATGACATAAAGCAAATGGATGTCAAAAAAAAAA (SEQ ID NO:1)

MALGPNCGILLFLAVSGCGHPQVSNSSSRIVGGHAAPAGTWPWQ

ASLRLHKVHVCGGSLLSPEWVLTAAHCFSGSVNSSDYQVHLGELTVTLSPHFSTVKRI

IMYTGSPGPPGSSGDIALVQLSSPVALSSQVQPVCLPEASADFYPGMQCWVTGWGYTG

EGEPLKPPYNLQEAKVSVDVKTCSEQAYNSPNGSLIQPDMLCARGPGDACQDDSGGPL

VCQVAGTWQQAGVVSWGEGCGRPDPRPGVYARVTAYVNWIIHHIPEAGGSGMQGLPWAP

LLAALFWPSLFLLLVSGVLMKYWLSSPSHAASEL (SEQ ID NO:2)

FIGURE 1

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underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

ATGGCTCTGGGGCCCAACTGTGGCATCCTACTGTTTCTGGCTGTTTCTG [GGTGTGGCCA
TCCCCAGGTTTCAAACCTCGGGAAGTCGAATCGTGGGAGGGCATGCTGCCCCAGCAGGCAC
ATGGCCGTGGCAGGCTAGCCTCCGTCTGCACAAGGTGCACGTGT] GTGGAGGCTCCCTGC
TCAGTCCAGAATGGGTGCTCACAGCAGCCCACTGCTTCTCTGGGTCTGTGAACCTCGTCTG
ATTATCAGGTGCACTTGGGAGAGCTTACGGTCACACTGTCTCCCCACTT [CTCCACTGTA
AAACGGATCATCATGTACACTGGCTCTCCAGGACCACCGGGTCCAGTGGGGACATTGCC
CTGGTGCAGCTGTCTCCCCGGTGGCCCTTTCCAGCCAGGTCCAGCCTGTGTGCCCTCCCA
GAGGCCTCAGCTGACTTCTACCCTGGGATGCAGTGCTGGGTGACTGGCTGGGGCTATACA
GGGGAGGGAG] AGCCTCTGAAGCCCCCATAACAACCTTCAGGAGGCCAAAGTCTCTGTGGT
GGATGTAAAGACCTGCAGCCAGGCTTACAATAGTCCCAATGGCAGCCTCATCCAGCCAGA
CATGTATGCGCCCGGGGCCCTGGGGATGCCTGCCAGGATGACTCTGGAGGGCCACTAGT
CTGCCAGGTGGCTGGAACCTGGCAGCAGGCCGGCGTTGTTCAGCTGGGGTGAGGGCTGTGG
CCGCCCTGACCGCCCTGGCGTCTATGCCCCGGGTACTGCCTATGTAAACTGGATCCACCA
CCACATCCCGGAAGCAGGGGGCTCAGGAATGCAAGGGCTTCCCTGGGCTCCTCTCCTGGC
TGCCCTCTTCTGGCCAAGCCTCTTCCTGCTGCTGGTCTCTGGAGTCTTGATGGCCAAGTA
CTGGCTGAGCTCTCCCTCCACGCGCCCTCGGAACCTCTGAATGAGGTGTAGCAACCAACC
CAAGTGTCTTTCTTAAATAAGTTAGTGTATTTCAGTTTGTCTTTGCCCCCTCCCCTCCCCT
TAGCTTTGACTTAGGAAGCCAAAGTTTCTGCATCAGATTATTGCAACATTAAACCTGAA
TTTGTAGAACGGATGACATAAAGCAAATGGATGTCAAAAAAAAAA (SEQ ID NO:1)

Gene Sequence Structure *

164 bp

Sequence Deleted

287 bp

Size of full-length cDNA: 1122 bp

FIGURE 2A

Targeting Vector* (genomic sequence)

Construct Number: 1607

Arm Length:

5': 6 kb

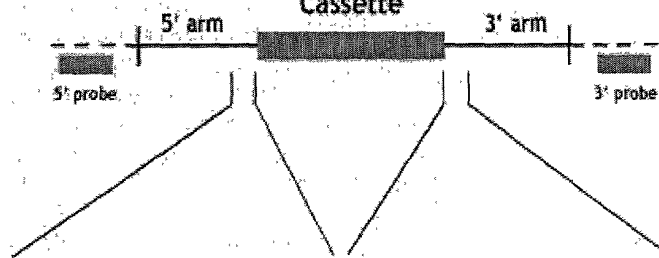
3': 0.7 kb

— Targeting Vector
- - - Endogenous Locus

* Not drawn to scale

LacZ-Neo

Cassette



5'>GGAGTCATGGAGGGCTCCAG
AGAAAGGGCATTGAGCAGAATGCC
GGTCTCCAGATTCCCTCACCAACA
GTGTCTCCTCTGGATCAGGGTGTG
GCCATCCCCAGGTTTCAAACTCGG
GAAGTCGAATCGTGGGAGGGCATG
CTGCCCCAGCAGGCACATGGCCGT
GGCAGGCTAGCCTCCGTCTGCACA
AGGTGACGTGT<3'
(SEQ ID NO:3)

5'>CTCCACTGTAAAACGGATCAT
CATGTACACTGGCTCTCCAGGACC
ACCGGGGTCCAGTGGGGACATGTC
CCTGGTGCAGCTGTCTCCCCGGT
GGCCCTTTCCAGCCAGGTCCAGCC
TGTGTGCCTCCCAGAGGCCTCAGC
TGACTTCTACCCTGGGATGCAGTG
CTGGGTGACTGGCTGGGGCTATAC
AGGGGAGGGAG<3'
(SEQ ID NO:4)

FIGURE 2B

necropsy - body weight

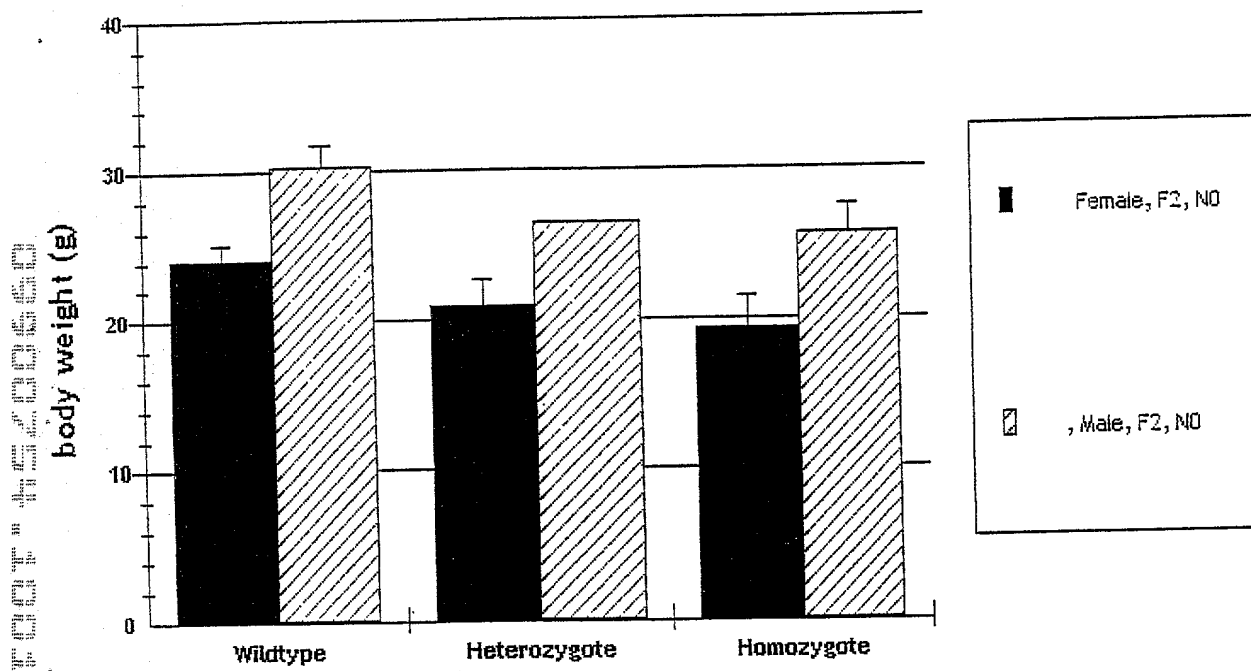


FIGURE 3

necropsy - thymus weight/body weight

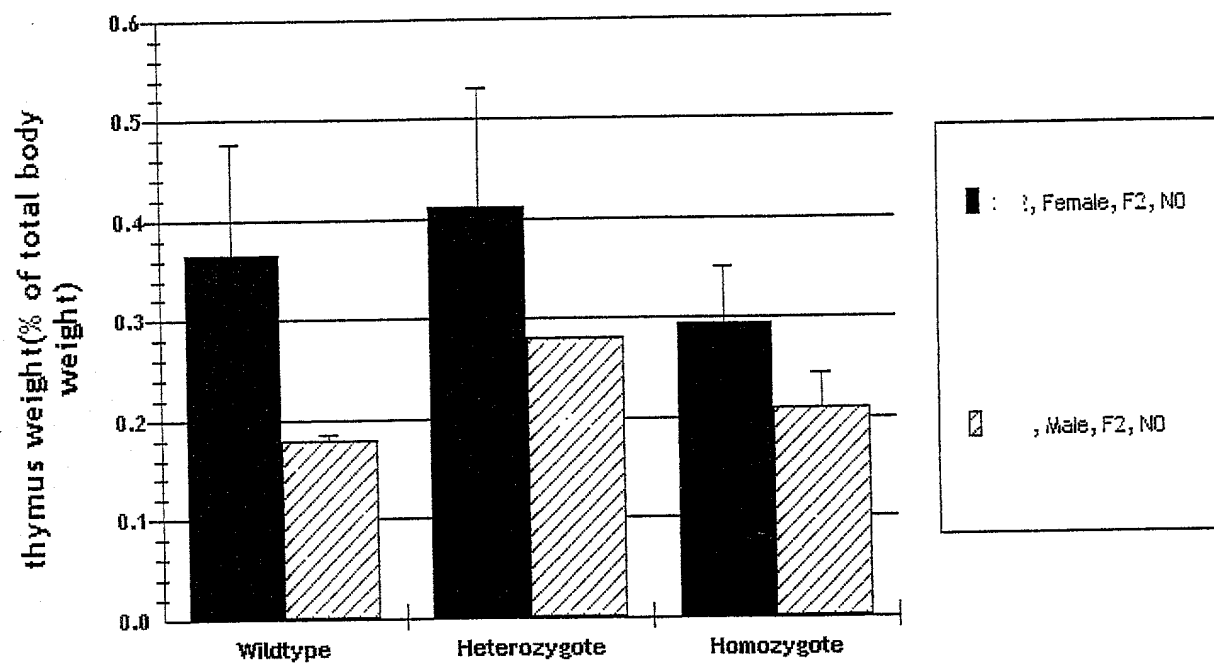


FIGURE 4

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Phenotypic Data Summary - Startle Response Amplitude

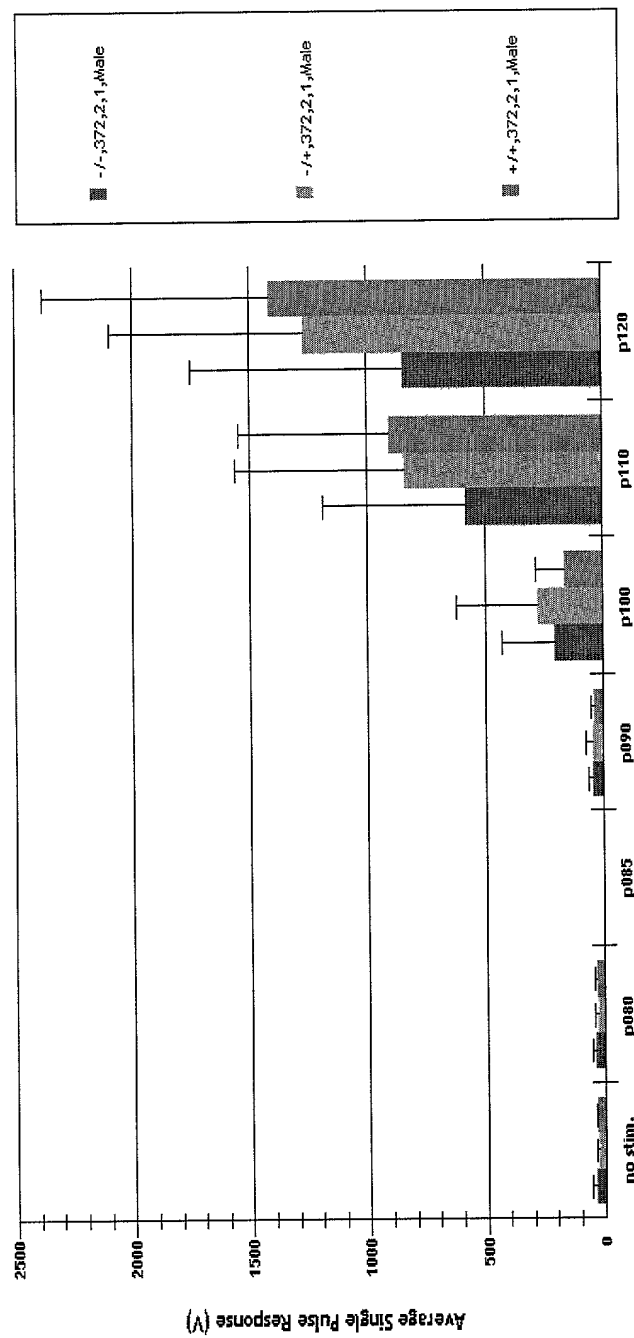


FIGURE 5